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| 09/265,489 | 03/09/1999 | SASHIKANTH CHANDRASEKARAN | 237/116 | 4574 |

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EXAMINER

TO, BAOQUOC N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2172

DATE MAILED: 10/09/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/265,489

Applicant(s)

SASHIKANTH
CHANDRASEKARAN

Examiner

Baoquoc N To

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

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DETAILED ACTION

1. Claims 1-27 are pending and claims 28-44 are newly added claims.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 13 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Chandra et al. (US. Patent No. 6,058,389).

Regarding on claim 1, Chandra teaches a method for managing information to be accessed by multiple consumers, said information comprising one or more information records, said information records to be accessed by said multiple consumers in a specified order, each said information record comprising data to be accessed by a consumer, said method comprising:

Providing said data of an information record to a consumer (queue table provides information to the user) (col. 6, lines 45-47).

Updating a history table (dictionary table is updated to reflect the new queue table or the existing queue table) (col. 31, lines 50-55), said history table (queue table) (col. 7, lines 4-6) comprising one or more history records (queue), each said history (col. 7, lines 4-6) record comprising a message state field (MSG_STATE) (col. 7, lines 21-25), said updating (updates the state) comprising setting said message state field in a history record corresponding to said consumer to indicate said consumer accessed said data (the process then updates the state of the current message to PROCESSED" (col. 19, lines 25-27).

Regarding on claim 2, Chandra teaches each said information record further comprises a message identifier value (MSG_ID) (col. 7, line 19) that identifies the data of said information record and each said history record further comprises a message id field that identifies data in an information record (col. 7, lines 15-45).

Regarding on claim 3, Chandra teaches history record (queue record) further comprises a consumer id field that identifies a consumer (DEQ_USER ID) (col. 7, lines 39-40) of said multiple consumers that is to access data in an information record, said data identified by said message id field (in said history record (message queue), said consumer id field of said history record identifying said history record as corresponding to said consumer (col. 7, lines 15-45).

Regarding on claim 4, Chandra teaches updating (updates) comprising setting said message state field in the history record with a message id field the identifies said data that said consumer is provided access to and with a consumer id field that identifies said consumer (the process then updates the state of the current message to PROCESSED" (col. 19, lines 25-27).

Regarding on claim 5, Chandra teaches history table (queue table) comprises a history record (queue message) (col. 7, lines 5-12) for each consumer (one or more application), for each information record comprising data to be provided to each said consumer, and in which prefix index key (an index) (col. 31, lines 60-66) compression is used to store only on instance of a message identifier value that identifies (SMG_ID) (col. 7, line 19) the data of an information record in said history table for each history record for said information record (col. 7, lines 15-45).

Regarding on claim 6, Chandra teaches storing data to be accessed by a consumer in an information record:

Creating (creating) a history record for each consumer that is access said data (col. 7, lines 64-67); and

Setting said message state field (MSG_STATE) (col. 7, lines 22-23) in each said history record to indicate said data has not been accessed (the process then updates the state of the current message to PROCESSED" (col. 19, lines 25-27).

Regarding on claim 7, Chandra teaches a read-order table (queue table) (col. 7, lines 5-10), said read-order table (queue table) (col. 7, lines 5-10) comprising order data (message queues) (col. 7, lines 5-10) that indicates the relative order that data in said information records is to be accessed by said multiple consumers (one or more applications) (col. 12, lines 11-16), said method further comprising identifying the data of in information record that a consumer is to be provided access to by said order data in said read-order table (col. 8, lines 41-46).

Regarding on claim 8, Chandra teaches reading one or more history records (queue messages) of said history table (queue table) (col. 7, lines 5-12), said one or more history records comprising a history table read (col. 8, lines 60-67); and

Deleting (delete) (col. 11, lines 55-60) an information record if all the message state fields in all of the history records of said history table read indicate that said data in said information record has been accessed (col. 7, lines 45-55).

Regarding on claim 9, Chandra teaches a work list table (queue table), said work list table comprising one or more work entries (queue messages) (col. 7, lines 5-12), each work entry comprising an identification of data in an information record (col. 8, lines 60-67).

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Regarding on claim 10, Chandra teaches adding a work entry to said work list table (message queue table) (col. 7, lines 5-12), said work entry comprising an identification (of said data said consumer is provided access to (col. 8, lines 60-67).

Regarding on claim 11, Chandra teaches accessing a work entry in said work list table (col. 8, lines 60-67);

Reading one or more history records of said history table, said one or more history records comprising a history table read (queue table), said one or more history records comprising said history table read determined by said work entry (col. 8, lines 60-67); and

Deleting an information record if all the message state fields (MSG_STATE) (Col. 7, lines 22-23) in all of the history records (message queue) of said history table (queue table) (col. 7, lines 5-12) indicate that said data in said information record has been accessed (col. 6, lines 45-60).

Regarding on claim 12, Chandra teaches batting two or more work entries in said work table list table (col. 6, lines 45-60); and

Performing in a single transaction (transaction) (col. 6, lines 47-50) reading one or more history records (queue record) of said history table (queue table) (col. 7, lines 1-12), said one or more history records determined by said two or more work entries, and deleting one or more information records (col. 6, lines 45-60).

Regarding on claim 13, Chandra teaches a system for the delivery of information to multiple consumers, said system comprising:

An information queue (queue table) comprising one or more information queue records (queue) (col. 7, lines 4-6), each said information queue record comprising information to be accessed by one or more consumers (consumer messages by DEQUEUE operation) (col. 6, lines 60-63); and

A table (each queue table) separated from said information queue comprising one or more table records (queue message 208), each said table record comprising an identification (each row of the queue table 200 represents a message 208 in a queue 202, 204) (col. 7, lines 6-12) of said information in an information queue record, each said table record further comprising a consumer identification field (DEO_USER_ID) (col. 7, lines 40) comprising an identification of one of said one or more consumers (user id of the user who dequeued the message) (col. 7, line 40).

Regarding on claim 14, Chandra teaches each said information queue record (queue 202, 204) further comprises said identification of said information (MSG_ID) (col. 7, line 19) of said information queue record (each row of the queue table 200 represents a message 208 in a queue 202, 204) (col. 7, lines 6-12):

Regarding on claim 15, Chandra teaches each said table record (queue record 202, 204) (col. 7, lines 6-10) further comprises a message state field (MSG_STATE) (col. 7, lines 22-23) that indicates if the information in said information queue identified

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in the corresponding information identification field of said table record has been delivered to the consumer identified in the consumer identification field of said table record (col. 7, lines 28-40).

Regarding on claim 16, Chandra teaches a read-order table record (queue message 202, 204) (col. 7, lines 6-10) further comprises state field (MSG_STATE) (col. 7, lines 22-23) that indicates if the information in said information queue identified in the corresponding information identification field of said table record (MSG_ID) (col. 7, line 19) has been delivered to the consumer identified in the consumer identification field (ENQ_USER_ID) of said table record (col. 8, lines 41-46).

Regarding on claim 17, Chandra teaches read-order table (queue table) (col. 7, lines 4-5_ comprises one or more records (queue record) (col. 7, lines 6-7), each said record of said read-order table comprising in identification field (message_id) (col. 7, line 19) identifies information in an information queue record, each said record of said read-order table further comprising an enqueue time field (ENQ_USER_ID) comprises said order data (col. 7, line 34).

Regarding on claim 18, Chandra teaches a work list table (queue table), said work list table comprising one or more work list entries (message queues) (col. 7, lines 5-10), each said work list entry comprising an identification of information in an information queue record (col. 8, lines 60-65).

Regarding on claim 19, Chandra teaches work list entry is a record (message queue) (col. 7, lines 5-12).

Regarding on claim 20, Chandra teaches work list table (queue table) comprises one or more work records (message queues 202, 204) (col. 7, lines 5-12) and each said work list entry is a field in a work record (queue name) (col. 8, lines 60-65).

Regarding on claim 21, Chandra teaches a system for the delivery of messages to multiple consumers, said system comprising:

A message queue (queue table contains more messages queues 202, 204) (col. 7, lines 5-10f) comprising one or more message queue records (a queue is a collection of message 208 ordered as in a list) (col. 6, lines 64-65), each said one or more queue records (each row of the queue table 200 has the following columns) comprising a message (queue name) (col. 7, line 18) and a message identification (message identification) (col. 7, line 19);

A history table (queue table) separated from said message queue comprising one or more history records (each queue table 200 can contain multiple queue message), each of said one or more history records comprising a message identification (MSG_ID) (, a consumer identification and a message state identification; and

A work list table (Time Manager table or Time table 216) separated from said message queue and said history table (queue table) comprising one or more work list

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entries (row for each message 208 that is subject to a delay time or expiration time) (col. 8, lines 61-63), each said work list entry comprising a message identification (message identification) (col. 8, lines 63-64).

Regarding on claim 22, Chandra teaches a read-order table comprising one or more read-order records (queue message), each said read-order-record comprising a message identification (MSG_ID) (col. 7, line 19) and order data, said order data indicating the relative order that the message of said message queue that is identified by the message identification of said read-order record is to be delivered to a consumer (col. 8, lines 41-46).

Regarding on claims 23, 31 and 38, Chandra teaches a method for multiple consumers to access information in a non first-in first out (different order in the dequeue process) (col. 31, lines 6-9), prescribed order, said information comprising one or more piece of information, a first piece of information stored in a first location, said method comprising:

Providing access (DEQUEUE message of the transaction) (col. 11, lines 45-47) to said first piece of information to a first consumer of said multiple consumers (the value of this parameter specifies the message grouping behavior for queues created in the table) (col. 31, lines 31-33);

Indicating in a second location (time table read the reads message and all its value) (col. 29, lines 26-30) that said first consumer has accessed said first piece of

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information (the value of this parameter is a user specified description of the queue table) (col. 31, lines 28-30); and

Indicating in a third location (CREATED_QTABLE process checks whether the queue table exists in the Queue Table Dictionary) (col. 31, lines 48-50) that said second consumer has accessed said first piece of information (if the queue tables does not exist in the dictionary table, the process check if whether the named queue table exists in the system anymore) (col. 31, lines 51-53).

Regarding on claims 24, 32 and 39, Chandra teaches first location (DEQUEUE message of the transaction) (col. 11, lines 45-47) comprises an information entry in a queue of information (message queue) (col. 7, lines 5-12).

Regarding on claims 25, 33 and 40, Chandra teaches queue information (queue table) comprises one or more information entries (message queues 202, 204) (col. 7, lines 4-13), and each said information entry comprises a piece of information to be accessed by one or more of said multiple consumers (one or more applications) (col. 12, lines 10-17), each said information entry further comprising an identification (MSG_ID) (col. 7, line 19) of said piece of information of said piece of information in said information entry (col. 6, lines 12-65 and col. 8, line 1-65).

Regarding on claims 26, 34 and 41, Chandra teaches queue of information (queue message) (col. 7, lines 5-10) comprises one or more information entries

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(message queue 202, 204) (col. 7, lines 5-10), and each said information entry (message queue 202, 204) (col. 7, lines 5-10) comprises a piece of information to be accessed by one more of said multiple consumers (one or more application) (col. 12, lines 10-17), each said information entry further comprising an identification of said piece of information in said information entry (col. 6, lines 12-65 and col. 8, line 1-65).

Regarding on claims 27, 35 and 42, Chandra teaches deleting (deleting) said entry (message) (col. 11, lines 56-58) comprising said first piece of information that said first consumer and said second consumer is provided access to from said queue of information after said first consumer after said first consumer and said second have accessed said first piece of information (col. 6, lines 12-65 and col. 8, line 1-65).

Regarding on claims 28, 36 and 43, Chandra teaches second location comprises a history entry (queue message) in a history table (queue table) (col. 7, lines 5-10), said history entry comprising an identification of said first piece of information and an identification of said first consumer (col. 6, lines 12-65 and col. 8, line 1-65).

Regarding on claims 29, 37 and 44, Chandra teaches third location comprises another history entry (message queue) in said history table (queue table) (col. 7, lines 5-10), said other history entry (queue message) comprising an identification of said first piece of information (col. 7, lines 4-10) and in identification of said second consumer (col. 6, lines 12-65 and col. 8, line 1-65).

Regarding on claims 30, 38 and 45, Chandra teaches indicating in a fourth location an order in which said one or more pieces of information is to be accessed by said multiple consumers (col. 19, lines 28 and col. 20, lines 65 and fig. 6A).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:


Crystal Park II
2121 Crystal Drive

Application/Control Number: 09/265,489
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Arlington, VA 22202
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Baoquoc N. To
September 30, 2003



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PRIMARY PATENT EXAMINER
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